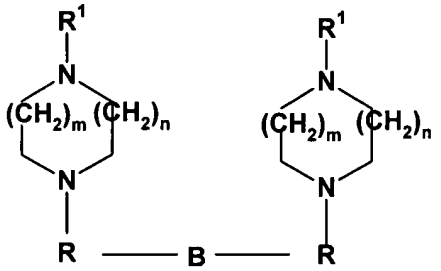
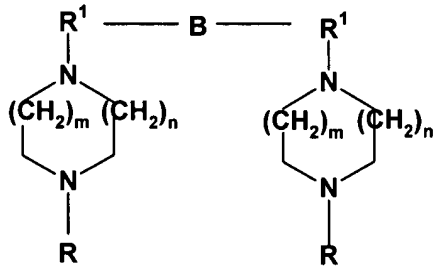
AMENDMENTS TO THE CLAIMS

1. – 16. (cancelled).

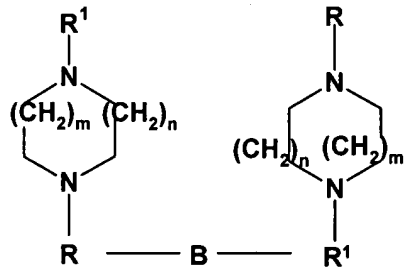
17. (previously presented) A dimeric diazacycloalkane represented by Formula II, III, or IV



(II)



(III)



(IV)

any of its enantiomers or any mixture thereof, an N oxide thereof, a pharmaceutically acceptable salt thereof, in a labelled or un-labelled form,

wherein,

n is 1; and

m is 2; and

R represents hydrogen, an alkyl group, a cycloalkyl group, a cycloalkylalkyl group, or an alkenyl group, or, when R is shown with two valences, R represents an alkylene group, a cycloalkylene group, a cycloalkylalkylene group, or an alkenylene group; and

R^1 represents pyridyl, pyridazinyl, quinolinyl or isoquinolinyl, which monocyclic or bicyclic heterocyclic group is optionally substituted one or more times with substituents selected from the group consisting of alkyl, alkoxy, cycloalkoxy, alkoxyalkoxy, alkoxyalkenyl, alkoxyalkynyl, alkynyl, alkenyl, alkenylthio, alkylseleno, alkoxycycloalkyl, hydroxyalkoxy, alkylthio, arylalkylthio, alkenoxy, alkynoxy, carboxylamido, arylthio, hydroxy, trifluoromethanesulfonyloxy, halogen; phenyl; phenyl substituted with alkyl, alkoxy, hydroxy, amino, or nitro; a pyrrolinyl, a piperidinyl, a tetrahydropyridyl, or a morpholinyl group, or, when R^1 is shown with two valences, R^1 is a divalent bridging radical derived by removal of a hydrogen atom from one of the groups listed in this definition of R^1; and

"-R-B-R-" in Formula II represents a single bond bridge or a bridging group of the formula "-R-R-" or a bridging group of the formula "-R-"; or

"-R-B-R^1-" in Formula IV represents a single bond bridge or a bridging group of the formula "-R-R^1-" or "-R-B-" in Formula IV represents a single bond bridge; or

"-R^1-B-R^1-" in Formula III represents a single bond bridge or a bridging group of the formula "-R^1-R^1-" or a bridging group of the formula "-R^1-"; or

"-R^1-B-R-" in Formula IV represents a single bond bridge or a bridging group of the formula "-R^1-R-"; or "-R^1-B-" in Formula IV represents a single bond bridge; and

B represents a single bond bridge or a bridging element of the formula "-ALK-", "-ALK-X-ALK-", "-X-ALK-X-", "-PHE-", "-X-PHE-X-", or "-ALK-PHE-ALK-"; wherein "ALK" represents a single bond bridge or alkylene, alkenylene, or alkynylene; and "PHE" represents a phenylene group; and X represents O, S, NH, N-alkyl, or Se.

18. (currently amended) The diazacycloalkane of claim 17, wherein R^1 represents a member selected from the group consisting of

5-(1-heptynyl)-3-pyridyl;
5-(1-hexynyl)-3-pyridyl;
5-(1-pentynyl)-3-pyridyl;
5-(1-butynyl)-3-pyridyl;
5-(1-propynyl)-3-pyridyl;
~~5-ethenylenethio-3-pyridyl;~~
~~5-(1-propenylenethio)-3-pyridyl;~~
~~5-(1-butenylenethio)-3-pyridyl;~~
~~5-(1-pentenylenethio)-3-pyridyl;~~
~~5-ethenyleneseleno-3-pyridyl;~~
~~5-(1-propenyleneseleno)-3-pyridyl;~~
~~5-(1-butenyleneseleno)-3-pyridyl;~~
~~5-(1-pentenyleneseleno)-3-pyridyl;~~
5-methylseleno-3-pyridyl;
5-ethylseleno-3-pyridyl;
5-propylseleno-3-pyridyl;
5-butylseleno-3-pyridyl;
5-(pyrrolin-2-yl)-3-pyridyl;
5-(pyrrolin-3-yl)-3-pyridyl;
5-[N-(1,4,5,6-tetrahydropyridyl)]-3-pyridyl;
5-[N-(1,2,5,6-tetrahydropyridyl)]-3-pyridyl;
5,6-dibromo-3-pyridyl;
5-bromo-6-chloro-3-pyridyl;
6-bromo-5-chloro-3-pyridyl;
6-bromo-3-pyridyl;
5,6-dichloro-3-pyridyl;
6-fluoro-3-pyridyl;
6-iodo-3-pyridyl;
5-chloro-6-fluoro-3-pyridyl;
5-chloro-6-iodo-3-pyridyl;
5-bromo-6-fluoro-3-pyridyl;

5-bromo-6-iodo-3-pyridyl;
6-fluoro-pyridazinyl;
6-iodopyridazinyl;
5-pentyloxy-3-pyridyl;
5-(*trans*-hex-2-en-1-yl-oxy)-3-pyridyl;
5-butoxy-3-pyridyl;
5-methoxy-3-pyridyl;
5-propyloxy-3-pyridyl;
5-ethoxy-3-pyridyl;
5-(2-ethyl-1-butoxy)-3-pyridyl;
5-(1-methyl-1-prop-2-en-oxy)-3-pyridyl;
5-(hex-2-en-oxy)-3-pyridyl;
5-(2-methyl-1-prop-1-en-oxy)-3-pyridyl;
5-(1-piperidinyl)-3-pyridyl; and
5-(1-morpholinyl)-3-pyridyl.

19. (previously presented) The diazacycloalkane of Formula III of claim 17, wherein "-R^1-B-R^1-" represents a single bond bridge or a bridging group of the formula "-R^1-R^1-" or a bridging group of the formula "-R^1-"; or B is a bridging group of the formula "-X-ALK-X-", wherein "ALK" represents C_{1-4}-alkylene; or B is a bridging group of the formula "-ALK-PHE-ALK-", wherein "ALK" represents C_{1-4}-alkylene, and "PHE" represents a phenylene group.

20. (previously presented) The diazacycloalkane of claim 17, said compound being
3,5-*Bis*-(N,N′-homopiperazinyl)-pyridine;
1,4-[α,α′-*Bis*-(5-Ethoxy-3-pyridyl-1-homopiperazinyl)]-dimethylbenzene;
1,4-[α,α′-*Bis*-(6-Chloro-3-pyridazinyl-1-homopiperazinyl)]-dimethylbenzene;
O,O′-*Bis*-[5-(1-homopiperazinyl)-3-pyridyl]-ethyleneglycol; or
Homopiperazinyl-5-pyrid-3-yl-5-pyrid-3-yl-homopiperazine;
any of its enantiomers or any mixture thereof, an N oxide thereof, a pharmaceutically acceptable salt thereof, in a labelled or un-labelled form.

21. – 22. (cancelled).

23. (previously presented) A pharmaceutical composition comprising a therapeutically-effective amount of a diazacycloalkane of claim 17, or a pharmaceutically-acceptable addition salt thereof, together with at least one pharmaceutically-acceptable carrier or diluent.

24. (previously presented) A method of treatment of withdrawal symptoms responsive to the activity of nAChR modulators, caused by termination of use of an addictive substance of a living animal body, including a human, comprising the step of administering to such a living animal body, including a human, in need thereof a therapeutically effective amount of the diazacycloalkane of claim 17.

25. (previously presented) The method according to claim 24, wherein said addictive substance is tobacco.